AMENDMENTS TO THE SPECIFICATION

Page 1, Paragraph 1

This invention relates to an automated tube handler system that includes a robotic tube handler and a controller. In the described embodiments, the robotic tube handler has a bed for orthoganal placement of a plurality of tube racks, particularly standard racks that hold an array of tubes, such as the SBS type 96 ~~tuck~~ tube racks.

Page 2, Paragraph 1

The tube handler of the subject invention automates the transfer of tubes among tube locations~~, in~~ . In the embodiments described, includes features such as a parking holder and an interhandler shuttle holder which adds to the transfer locations for tracking and positioning discrete tubes.

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As shown in Fig. 1 a generally rectangular housing 30 provides a perimeter frame 32 for a bed 33 having a removable or installed open bed tray 34 (shown in Fig.1 without the plate scanner). The bed tray 34 has a series of parallel support rails 36 for seating standard tube racks 38 in a predefined array 40 as shown in Fig. 2. The racks ~~28~~ 38 in Fig. 2 show a single tube 42 in each rack 38.

Page 8, Paragraph 3

The ~~cross-bar~~ crossbar transport unit 50 traverses fore and aft over the bed 33 by a belt assembly 60 having fore and aft belt gears 62 and 64 with belts 66. The

fore belt gears 62 have a common support shaft 68 as shown in the breakaway of Fig. 1. As central gear 70 on the shaft 68 has a short belt 72 connected to the drive gear 74 of a precision stepping motor 76.

Page 10, Paragraph 2

It is to be understood that the tube handler system of this invention can be easily adapted to a tube filler by removal of the pick head unit 90 and replacement with a conventional tube-fill unit. The operation of the tube handler with the tube-~~Fill~~ fill unit is similar to the operation with the pick head unit 90. Alternately, a tube ~~Fill~~ fill unit ~~1775~~ 175 can comprise an integrated tube filler 174 in the form of a fill cannular 176 as shown in the enlarged, partially exploded view of Fig. 5 can be fitted to a modified tubular center shaft 178a for a combination fill and pick unit 174.

Page 13, Paragraph 1

Referring to Figs. 8A, the procedure as outlined in the flow chart begins with a power-up start at box 300. This causes the initialization of the robotic tube handler 12 and host computer 18 at box 302. Following the initializing of the tube management program at box 304, the hardware status is checked using an appropriate subroutine at box 306. At decision diamond 308 the result, if unfavorable, generates an error message at box 310. If the status is OK, the program prompts the user for a work list at box ~~371~~ 312.

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As continued on Fig. 8B, before placing the tube rack onto the platform, the

user selects the location by scanning the location barcode with a portable scanner at box 326 for storage in a database at box 328. The user then scans the barcode on the rack at box ~~230~~ 330, ~~a~~ cross reference to A the platform location and rack identification occurs at box 330. Alternately, the tube rack is scanned by the tube handler scanner 206 and the user selects the location from a screen template on the monitor to cross reference the rack and location for logging into a database at box 330.

Page 14, Paragraph 3

At box 332, the program performs an error check on rack information. In addition to verifying a valid rack I.D., the routing may check against imported information to verify the correct racks are being loaded. At decision diamond 334, if invalid, an error message is generated at box 336. If valid, then proceed to tube movement subroutines at box 338.